

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**ETHNIC CUSTOMER ATTITUDES AND BELIEFS TOWARD
CONSUMING NEW ZEALAND DAIRY PRODUCTS**

*-- An Exploratory Study of New Zealand
Chinese Community in the Manawatu*

**A thesis present in partial fulfilment of the requirements for the
degree of
Master of Management in Agribusiness**

Massey University

Palmerston North, New Zealand

Dabing Wang

2001

Abstract

The objectives of this research are to identify the genuine attitudes and beliefs of New Zealand ethnic Chinese people toward consuming New Zealand dairy products. The purpose of this research is to provide some indicators to assist the achievement of further competitiveness in the whole process of developing marketing strategies in the Chinese market. The research examines the determinants of the overall attitudes toward the behaviour of consuming dairy products. The analysis shows the impact of cultural values and selected demographics on Chinese consumers' attitudes and beliefs.

This research was conducted in Palmerston North, New Zealand. In this research, the Fishbein and Ajzen expectancy-value model was applied to examine the attitudes and beliefs of New Zealand-settled Chinese people toward consuming dairy products. Validity of this theory was tested before it was employed to the Chinese consumers. Results from this study suggest validity when it is employed to the Chinese consumers.

This study reports on an exploratory survey of 75 Chinese respondents throughout Palmerston North during September 2001. In this research, the Fishbein and Ajzen expectancy-value model (F/A model) was used to examine attitudes of Chinese people toward consuming four different New Zealand dairy products: fluid milk, yoghurt, ice cream and cheese.

The findings show that the respondents have positive attitudes toward consuming different New Zealand dairy products. Attributes relevant to these products such as quality, nutrition, product sensory (mouth-feel) and wide product availability, are the attributes that most contribute to their overall attitudes. Analysis of Variance shows a positive relationship between the F/A model attitudes and respondents' age for fluid milk. That is, old Chinese people have more positive attitudes toward

consuming fluid milk. Furthermore, it also proved that the New Zealand-settled Chinese people have similar dairy preferences to Chinese who live in Mainland China, their preferences are not changed due to different lengths of residency. That is, fluid milk is the most consumed dairy product and cheese is the least favourite dairy food for most Chinese.

Acknowledgements

First of all, I would like to thank my supervisor, Professor William C. Bailey, for his generous and inspiring advice and instructions. He guided and encouraged me through all stages of this thesis.

I wish to dedicate this thesis to my wife Rong and my parents; I thank them for their support and encouragement throughout my university study.

I would like to thank the Applied Science Committee of Massey University for awarding me with a scholarship to pursue my research project studies. Also, I thank the Massey University multimedia lab staff, for their computer assistance since the first day of this research.

Thanks to Dr. Duncan Hedderley in the Department of Statistics, Massey University, for his advice on the statistical issues in this study.

Last, but definitely not least, I would like to thank all the respondents who took the time and effort to assist me in this research.

Table of Contents

Abstract.....	I
Acknowledgements.....	III
Table of Contents.....	IV
List of Figures.....	VI
List of Tables.....	VII

Chapter One: Background.....	1
1.1 Introduction.....	1
1.2 New Zealand Dairy Product Industries and Marketing.....	1
1.3 The Chinese Dairy Market: Production and Outlook.....	3
1.4 China's WTO Entry and Dairy Consumption	5
1.5 Justification.....	7
1.6 Objectives of this Research.....	9
1.7 Outline of the Thesis.....	9

Chapter Two: Literature Review.....	10
2.1 Introduction.....	10
2.2 Attitudinal Research in Marketing.....	10
2.2.1 Attitude Definitions.....	10
2.2.2 Attitude and Behaviour.....	11
2.2.3 Fishbein/Ajzen Attitudinal Theories and Related Research.....	11
2.3 Cultures and Food Choice.....	18
2.4 Cultural Values of the Chinese.....	19

Chapter Three: Methodology.....	22
3.1 Data Measurement.....	22
3.1.1 Identifying Salient Attributes of Dairy Product Consumption.....	22
3.1.2 Questionnaire Design.....	24
3.2 Data Collection.....	28
3.2.1 Sample.....	28
3.2.2 Survey Procedures.....	28
3.3 Descriptive Results and Data Analysis.....	30
 Chapter Four: Results and Discussion.....	 31
4.1 Respondents Profile.....	31
4.2 Validity Test.....	33
4.2.1 Compute New Variables.....	33
4.2.2 Correlation Analysis.....	35
4.3 Descriptive Results.....	39
4.4 Dairy Product Consumption Experiences	45
4.5 Cognitive Maps.....	50
4.6 Analyses of Demographic Characteristics.....	53
4.6.1 Crosstabulation Procedures.....	54
4.6.2 ANOVA Analysis.....	56
4.7 Discussion.....	63
4.7.1 Comparison with Previous Research.....	63
4.7.2 Implications of Product Key Attributes.....	65
4.8 Limitations and Possible Further Research.....	69
 Chapter Five: Summary and Conclusion.....	 70
 References.....	 73
 Appendix.....	 77

List of Figures

Figure 1.1 New Zealand export revenues 1999/00

Figure 1.2 Export share of international dairy trade

Figure 2.1 Attitude measures on a Bi-Polar affective scale

Figure 2.2 The theory of reasoned action

Figure 3.1 Measurement of the evaluative components associated to attributes

Figure 3.2 Measurement of the beliefs associated to attributes

Figure 3.3 An independent measure of overall attitudes toward consuming New Zealand fluid milk.

Figure 3.4 Some open-ended questions in the survey

Figure 4.1 Regression line representing the relationship between the F/A model attitude and the sum of subjective beliefs

Figure 4.2 Cognitive map showing the attribute distributions of milk

Figure 4.3 Cognitive map showing the attribute distributions of yoghurt

Figure 4.4 Cognitive map showing the attribute distributions of ice cream

Figure 4.5 Cognitive map showing the attribute distributions of cheese

Figure 4.6 The Boxplot representing normality and homogeneity based on Sex

Figure 4.7 The Boxplot representing normality and homogeneity based on Education

Figure 4.8 The Boxplot representing normality and homogeneity based on Age

Figure 4.9 The Boxplot representing normality and homogeneity based on Length of residency

Figure 4.10 Attitude Mean plot based on Age

List of Tables

Table 1.1 Per capital consumption of selected dairy products

Table 1.2 China's tariff rates for dairy products, 1999-2000

Table 2.1 Comparison between Chinese and American culture

Table 3.1 Summarized characteristics of food products

Table 4.1 Profiles of the survey respondents

Table 4.2 Computing results of the overall attitude scores

Table 4.3 Correlations between the overall feeling and the F/A model attitudes

Table 4.4 Correlations between the overall attitudes and the sum of subjective beliefs

Table 4.5 Correlations between the overall attitudes and the sum of evaluative aspects

Table 4.6 Correlations between the F/A model attitude and the frequencies of different dairy consumption

Table 4.7 Summaries of the evaluative aspect scores of attributes

Table 4.8 Summaries of subjective belief items for four dairy products

Table 4.9 Summaries of attitude toward each attribute measured by the F/A model

Table 4.10 Overall attitudes toward consuming New Zealand dairy products

Table 4.11 Descriptive statistics of four dairy products consumption

Table 4.12 Consumption frequencies of four dairy products

Table 4.13 Chinese Dairy consumption before the arrival to New Zealand

Table 4.14 Sequence of three most consumed dairy products

Table 4.15 Chinese dairy consumption after the Arrival

Table 4.16 Modified profiles of survey respondents

Table 4.17 Observed frequencies of education, age, length of residency on gender

Table 4.18 Observed frequencies of age, length of residency on education category

Table 4.19 Representing the relationship between age and length of residency

Table 4.20 Relationship between the F/A attitudes and selected demographics

Table 4.21 Group differences among respondents' ages

Table 4.22 Relationships between attitudes and other three dairy products

Table 4.23 Summary of belief scores of fluid milk by attributes

Table 4.24 Summary of belief scores of yoghurt by attributes

Table 4.25 Summary of belief scores of ice cream by attributes

Table 4.26 Summary of belief scores of cheese by attributes